



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,970	12/01/2003	Chung J. Lee	QTH-8024US2 DBB	3028

7590 03/21/2005

Sheldon R. Meyer
FLIESLER DUBB MEYER & LOVEJOY LLP
Fourth Floor
Four Embarcadero Center
San Francisco, CA 94111-4156

EXAMINER

NYALLEY, LANSANA

ART UNIT PAPER NUMBER

1621

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/724,970

Applicant(s)

LEE ET AL.

Examiner

Lansana Nyalley

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 71-77 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 71-77 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

The cancellation of claims 1-70 and the addition of claims 71-77 by preliminary amendment are acknowledged.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 71-77 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Bielefeldt et. al. (US patent 5,283,378).

WHAT APPLICANTS CLAIM.

Applicants claim a precursor for making a polymer, said precursor having the formula: Y-Ar-(Y') subscript (Z), wherein Z is an integer of 1 to about 6, wherein Y and Y' are leaving groups, and Ar is a compound containing an aromatic moiety having from greater than 6 to about 40 carbon atoms, and having at least one sp²C-sp²C double bond and one or more of sp²C-F or sp²C-H bonds.

**DETERMINATION OF THE SCOPE AND THE CONTENT OF THE
PRIOR ART (M.P.E.P. 2141.01).**

Bielefeldt et. al. teach a compound of formula I (column 1, lines 48-68, column 2, lines 1-29) and a compound of formula II (column 4, lines 1-25).

**ASCERTAINMENT OF THE DIFFERENCE BETWEEN THE PRIOR ART
AND THE CLAIMS (M.P.E.P. 2141.02).**

The difference between Bielefeldt et. al. and the instant application is that Bielefeldt et. al. do not specifically disclose any particular species as recited in the claims of the instant application

**FINDING OF PRIMA FACIE OBVIOUSNESS-RATIONAL AND
MOTIVATION (M.P.E.P. 2142-2143).**

Though Bielefeldt et. al. do not specifically teach any particular species as claimed in the instant application, the claimed compounds are obvious over the prior art of record when , in formulas I and II : Ar.= an aromatic radical having 6 to 10 carbon atoms; RF= independently of one another, represent fluorine or fluorine-containing radical having 1 to 4 carbon atoms and 1 to 6 fluorine atoms; X= represents C1- to C4-alkyl, fluorinated C1-C4-alkyl; Hal= independently of one another, represent chlorine or bromine.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have looked to the teaching of Bielefeldt et. al. in order to produce the precursor for making a polymer. One of ordinary skill in the art would have been motivated to do so since Bielefeldt et. al. teach all the elements of the claims in the instant application with sufficient guidance, particularity and reasonable expectation of success that the invention would be prima facie

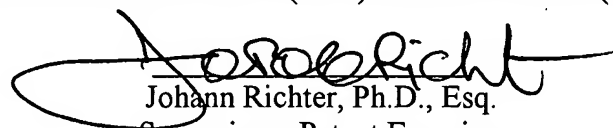
obvious to one of ordinary skill (the prior art references teach or suggest all the claim limitations with reasonable expectation of success. See M.P.E.P. 2143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lansana Nyalley whose telephone number is 571,272,0697. The examiner can normally be reached on 7:45 to 4:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571 272 0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lansana Nyalley, Ph.D.
03/ 11/ 2005



Johann Richter, Ph.D., Esq.
Supervisory Patent Examiner,
Technology Center 1600